

IN THE CLAIMS:

Please amend the claims as follows:

Claims 1-7 (Canceled).

Claim 8 (Currently Amended): A laser processing apparatus for welding stacked resin members to each other by using laser light, the apparatus comprising:

a semiconductor laser for generating laser light; and

a filter, disposed between the semiconductor laser and the resin members, for blocking light having a wavelength that is other than an oscillation wavelength of the semiconductor laser and wherein said blocked light becomes an observation wavelength for measuring a temperature of a welding area in the light generated by the semiconductor laser;

one of the stacked resin members, on the incident side of the laser light generated by the semiconductor laser, having a property of transmitting the laser light that is generated by the semiconductor laser and the thermally radiating light that is generated by the welding area;

the filter blocks the light that is generated by the semiconductor laser and that has a wavelength other than an oscillation wavelength of the semiconductor laser, and the light with said light having a wavelength falling within the range of 1500nm to 2800nm which can be transmitted through the resin member on the incident side of the laser light;

wherein the light that is generated by the semiconductor laser and has a wavelength that cannot be blocked by the filter is used for welding the resin members to each other, and the said

thermally radiating light that is generated by the welding area and has a wavelength ~~blocked by the filter that does not pass through said filter, said thermally radiating light~~ is used for measuring the temperature of the welding area.

Claim 9 (Currently Amended). A laser processing apparatus for welding stacked resin members to each other by using laser light, the apparatus comprising:

a semiconductor laser for generating laser light; and

optical means for converging the laser light generated by the semiconductor laser onto a welding area and blocking light having a wavelength that is other than an oscillation wavelength of the semiconductor laser ~~and wherein said blocked light~~ becomes an observation wavelength for measuring a temperature of the welding area in the light generated by the semiconductor laser;

one of the stacked resin members, on the incident side of the laser light generated by the semiconductor laser, having a property of transmitting the laser light that is generated by the semiconductor laser and the thermally radiating light that is generated by the welding area;

optical means blocks the light that is generated by the semiconductor laser and ~~that~~ has a wavelength other than an oscillation wavelength of the semiconductor laser, and ~~the light with said light having~~ a wavelength falling within the range of 1500nm to 2800nm which can be transmitted through the resin member on the incident side of the laser light;

wherein the light that is generated by the semiconductor laser and has a wavelength that cannot be blocked by optical means is used for welding the resin members to each other, and the

said thermally radiating light that is generated by the welding area and has a wavelength ~~blocked~~
~~by the optical means that does not pass through said optical means, said thermally radiating light~~
is used for measuring the temperature of the welding area.

Claims 10-12 (Canceled).

Claim 13 (Currently Amended): A laser processing method for welding stacked resin members to each other by using laser light, the method comprising:

a laser light generating step of causing a semiconductor laser to generate laser light; and
a filtering step of blocking light having a wavelength that is other than an oscillation wavelength of the semiconductor laser ~~and wherein said blocked light~~ becomes an observation wavelength for measuring a temperature of a welding area in the light generated by the laser light generating step with a filter before welding;

one of the stacked resin members, on the incident side of the laser light generated by the laser light generating step, having a property of transmitting the laser light that is generated by the laser light generating step and the thermally radiating light that is generated by the welding area;

the filtering step blocks the light that is generated by the laser light generating step and ~~that~~ has a wavelength other than an oscillation wavelength of the semiconductor laser, and the ~~light with said light having~~ a wavelength falling within the range of 1500nm to 2800nm which can be transmitted through the resin member on the incident side of the laser light;

wherein the light that is generated by the laser light generating step and has a wavelength that cannot be blocked by the filtering step is used for welding the resin members to each other, and the said thermally radiating light that is generated by the welding area and has a wavelength blocked by the filtering step that does not pass through said filtering step, said thermally radiating light is used for measuring the temperature of the welding area.

Claim 14 (Currently Amended): A laser processing method for welding stacked resin members to each other by using laser light, the method comprising:

a laser light generating step of causing a semiconductor laser to generate laser light; and
a filtering step of blocking light having a wavelength that is other than an oscillation wavelength of the semiconductor laser and wherein said blocked light becomes an observation wavelength for measuring a temperature of a welding area in the light generated by the laser light generating step with an optical system adapted to converge the laser light generated by the laser light generating step onto the welding area;

one of the stacked resin members, on the incident side of the laser light generated by the laser light generating step, having a property of transmitting the laser light that is generated by the laser light generating step and the thermally radiating light that is generated by the welding area;

the filtering step blocks the light that is generated by the laser light generating step and that has a wavelength other than an oscillation wavelength of the semiconductor laser, and the

light with said light having a wavelength falling within the range of 1500nm to 2800nm which can be transmitted through the resin member on the incident side of the laser light;

wherein the light that is generated by the laser light generating step and has a wavelength that cannot be blocked by the filtering step is used for welding the resin members to each other, and ~~the~~ said thermally radiating light that is generated by the welding area and has a wavelength ~~blocked by the filtering step that does not pass through said filtering step, said thermally radiating light~~ is used for measuring the temperature of the welding area.

Claim 15 (Canceled).